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Declaration under Rule 4.17:

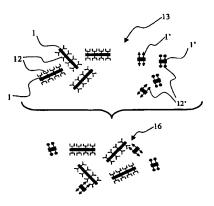
— of inventorship (Rule 4.17(iv)) for US only

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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR SOLUTION BASED MULTIPARAMETER ANALYSIS OF ANALYTES



(57) Abstract: There is described a system for multiparameter analysis of analytes. The system comprises: 1) primary supports (1) with a largest dimension (3) of 500 µm or less suspended in use in a fluid solution; 2) each primary support (1) comprises an identification means (2) for identification thereof; 3) at least one primary analyte (12) is bound to each primary support (1); 4) a secondary analyte (12') is suspended in use in the fluid solution; and 5) a measuring means (25) is arranged in communication with the fluid solution for monitoring interaction between the primary analyte (12) and secondary analyte (12'). The system is distinguished in that: 6) secondary supports (1') with a largest dimension at the most the same size as the largest dimension (3) of the primary supports (1) are suspended in use in the fluid solution; 7) each secondary support (1') comprises an identification means (2') for identification thereof; 8) at least one secondary analyte (12') is bound to each of the secondary supports (1'); and 9) the measuring means (25) is arranged to detect any post-reaction interaction between one or more primary analyte (12) and one or more secondary analyte (12') by detecting the identification means (2, 2') of the primary and secondary supports (1, 1') attached thereto. There is also described a method of multiparameter analysis of analytes using the system.





For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N33/543 G01N33/58

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 G01N B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, EMBASE, BIOSIS

C. DOCUME	INTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Retevant to claim No.	
Y	WO 00 16893 A (ENGLAND JAMES ;COLBY EDWARD (GB); DAMES ANDREW (GB); SENTEC LTD (G) 30 March 2000 (2000-03-30) the whole document	1-15	
Υ	WO 01 25002 A (NATAN MICHAEL J ; MALLOUK THOMAS E (US); PENN STATE RES FOUND (US)) 12 April 2001 (2001-04-12) the whole document	1–15	
Υ	WO 02 42736 A (RAVKIN ILYA ;GOLDBARD SIMON (US); HYUN WILLIAM C (US); VIRTUAL ARR) 30 May 2002 (2002-05-30) the whole document	1–15	
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Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: 'A' document defining the general state of the art which is not considered to be of particular relevance 'E' earlier document but published on or after the international filling date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'O' document referring to an oral disclosure, use, exhibition or other means 'P' document published prior to the international filling date but later than the priority date claimed	 "T" tater document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search 11 December 2003	Date of mailing of the international search report 30/12/2003
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ategory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
1	WO 02 01228 A (MINERVA BIOTECHNOLOGIES CORP) 3 January 2002 (2002-01-03) in particular pages 26-28; Figure 27 the whole document	1-15
ſ	US 6 361 950 B1 (MANDECKI WLODEK) 26 March 2002 (2002-03-26) abstract	10
Y	US 2001/034034 A1 (DANIELS R HUGH ET AL) 25 October 2001 (2001-10-25) in particular figure 1C the whole document	1–15



INTERNATIONAL SEARCH REPORT

International application No. PCT/GB 03/03268

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This Inte	rnational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. X	Claims Nos.: 16,17 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: see FURTHER INFORMATION sheet PCT/ISA/210
з. 🗌	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This into	ernational Searching Authority found multiple inventions in this international application, as follows:
1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remar	The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

International Application No. PCT/GB 03 \(0.3268 \)

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 16,17

The expression "substantially as hereinbefore described with reference to one or more of Figures 1-9b" is vague and unclear and does not clearly define the subject-matter for which protection is sought. Therefore, no meaningful search can be carried out for the subject-matter of theses claims.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.



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